

## Julian of Ascalon's Treatise and its Implications for Research and Conservation of Jordan's Archaeological Heritage\*

### 1. Remarks on Julian of Ascalon's Treatise

Julian of Ascalon's treatise is of fundamental importance for the study of Middle Eastern urban population centres in Late Antiquity.<sup>1</sup>

The treatise is a building law manual compiled by Julian, an architect who lived in the sixth century AD in Ascalon, a coastal town about 20km north of Gaza.<sup>2</sup> It consists of a collection of norms and customs concerning private building. We can therefore see it as a guide for cooperation between good neighbours.

The oldest surviving version comes from a collection of urban legislation dating from the early 11th century (Koder 1988: 85-97). Here it is entitled 'Extract of norms and customs in use in Palestine, by Julian of Ascalon, architect'. The main reference is codex *Genauensis gr. 23*, dating from the mid 14th century, discovered at Chalcedon in 1636 and donated to the Geneva Library (Nicole 1893).

Our main source for the indirect tradition is the *Hexabiblos*, a law handbook in six volumes, compiled in 1345 at Thessalonica by the legal expert Constantine Harménopoulos (Pitsakis 1971). Julian of Ascalon's treatise appears here under title IV of Book II. This cannot be entirely attributed to Julian however, since the author of the *Hexabiblos* partially modified the original text so as to adapt it

to his handbook, on occasion mixing passages by Julian with the work of other writers.<sup>3</sup>

Despite the rather difficult philological problems presented by the treatise, and its partial transmission, it is a fundamental source for knowledge of Middle Eastern Byzantine town planning.

The brief introduction (§ 1-2), where the author presents the aims of his study, is followed by the first part consisting of a long list of building norms (§ 3-51). This part consists of four sections, following the Hellenistic Greek scientific literature division into the four elements of fire, air, water and earth.

In the first section (§ 3-15: fire), the author lists the norms concerning distances between houses and the rules for protecting both buildings and their inhabitants from damage caused by fire, smoke and heat.

In the second section (§ 16-39: air), Julian deals with distances between the various dwellings in a town. He covers the problem of the opening up of doors and windows and the relationship between the storeys of a building. He underlines the importance of respect for the shared courtyard and other common areas. It is the former that plays the fundamental role of liason between the residents of the 'condominium'.

The third section (§ 40-46: water) refers to town

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logical mission at Qaşr al-Uşaykhim.

<sup>1</sup> The edition used was that by Catherine Saliou: *Le traité d'urbanisme de Julien d'Ascalon. Droit et architecture en Palestine au VI<sup>e</sup> siècle*, in *Travaux et Mémoires du Centre de Recherche d'Histoire et Civilisation de Byzance*, Collège de France, De Boccard, Paris 1996.

<sup>2</sup> Detailed information on Julian of Ascalon is still not available. See Geiger 1992: 31-43. On Ascalon: Bagatti 1974: 227-264; Allen 1991.

<sup>3</sup> For the critical edition cf.: Saliou 1996.

water supply infrastructures: water supply canals, drains and possible damage caused to houses by improper organisation of water discharge.

In the fourth section (§ 47-51: earth), Julian examines earthworks, ditches, gardens, planted areas and the distances required between them and inhabited areas. With reference to gardens, Julian highlights the fact that necessary distances are essential to keep walls free from branches and roots and to avoid damaging the neighbourhood.

The second part of the treatise (§ 52-56), which is considerably shorter than the first, concerns *prospectus*, views over hills, landscape and protection of privacy.

A final chapter (§ 57) concludes the treatise.

Reading this handbook on building law shows how its author filtered features of Roman origin and also some elements of the enormous rabbinical literature on the subject. On the one hand there is a clear relationship with the great treatise on architecture: *De Architectura* by Marcus Vitruvius Pollio, written between 27 and 23BC<sup>4</sup>. Vitruvius' frequently mentioned doctrine of the four elements<sup>5</sup> is the basis of Julian's text structure<sup>6</sup>. Julian also makes specific reference to Roman legislation. In Chapter 56.2 he mentions a law of the Emperor Zeno, concerning private town buildings, included in the eighth book of Justinian's *Corpus Iuris Civilis*<sup>7</sup>.

On the other hand, there are also clear links with Jewish literature, which included numerous Late Antique compilations of building norms and rules for cooperation with neighbours. One of these was the *Neziqim* treatise on damage from the Jerusalem Talmud, put together by the rabbis of Caesarea around the mid fourth century AD<sup>8</sup>.

## 2. Julian of Ascalon's treatise and on site topographical evidence in Jordan

The aim of this study is to verify the validity of the

treatise by directly applying its norms on site. Three sites were selected in the central and northern areas of the present day Kingdom of Jordan, the ancient Roman province of Arabia<sup>9</sup>: Umm al-Jimāl, Umm Qays and Umm ar-Raşāş.

*Umm al-Jimal*: the first site studied, is in north-eastern Jordan. The ancient place name is still under discussion<sup>10</sup>. The town was situated 25km south of Bostra, in an area between two main roads: to the west the Via Traiana, to the east, the road from Bostra to the oasis of al-Azraq, a major caravan route in the direction of the Arabian peninsular<sup>11</sup>.

It stood on a previous Nabataean settlement and, in the second century AD, when the region fell to Rome, its first circuit wall was built. A *castellum*, with exclusively military functions, dates from the fourth century AD, and, at the beginning of the fifth century the *dux* of the Roman province of Arabia, Pelagius, built a fortified barracks area, the *praetorium*, to replace the previous *castellum* which had been abandoned. In this period, and for the following two centuries, Umm al-Jimāl expanded considerably. During the sixth century AD, under the influence of the Ghassanid phylarchs, considerable building work took place, much of it still visible, including a large number of private houses<sup>12</sup>.

It is to these houses that we turn in our search for confirmation of Julian's statements in his treatise. After carrying out a survey of the town, we selected a number of private buildings, which supplied proof of the importance and validity of the treatise under examination. These buildings are situated in one of the three districts making up the town of Umm al-Jimāl, the south eastern one. The houses, built of large blocks of local basalt stone, still have one, two or even three storeys, and mostly have large central courtyards, onto which the various apartments give<sup>13</sup>.

The first case concerns two houses with a com-

<sup>4</sup> Among the most recent editions are: Marco Vitruvio Pollione, *De Architectura*. L. Migotto (ed.), edizioni Studio Tesi 1990.

<sup>5</sup> Vitruvius, *De Arch.*, I, 4, 5; II, 2, 1-2; VIII, Pref.

<sup>6</sup> § 1-2.

<sup>7</sup> *C.J.* VIII, 10, 12. In § 56.2 Julian wrote: "Zeno's constitution says that if a neighbour has moved 100 feet away anyone who so desires is allowed to build".

*C.J.* = *Corpus Iuris Civilis*. Okko Behrends, Berthold Kupisch, Hermann Seiler (eds.), Heidelberg 1995.

<sup>8</sup> Lieberman 1931, 1970/1971: 409-417; Blumberg 1970: 114-123; Bokser 1979: 139-256.

<sup>9</sup> Birley 1971; Jones 1971; Gutwein 1981; Barnes 1982; Sartre 1982;

Bowersock 1983; Graf 1988: 171-211; Walmsley 1996: 126-158.

<sup>10</sup> According to H.C. Butler (1913: 149-213) Umm al-Jimāl, from the Arabic 'the mother of camels', is Thanthia of the Tabula Peutingeriana. However it has been pointed out (Bauzou 1988: 292-300) that the distance between Thanthia and Bostra given by the Tabula does not correspond to the actual distance between Umm al-Jimāl and Bostra.

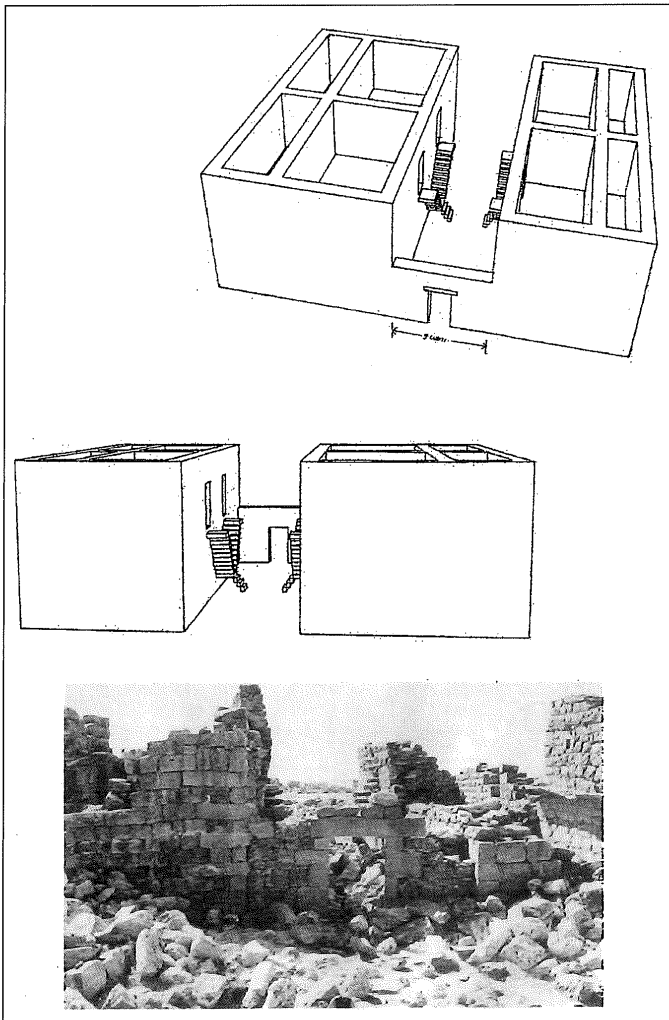
<sup>11</sup> Poidebard 1934; Parker 1987; Bauzou 1988: 292-300; Kennedy, Riley 1990; Khouiri (ed.) 2003.

<sup>12</sup> Parker 1986; de Vries 1990, 1993: 433-460, 1995: 421-434, 1998; Concina 2003.

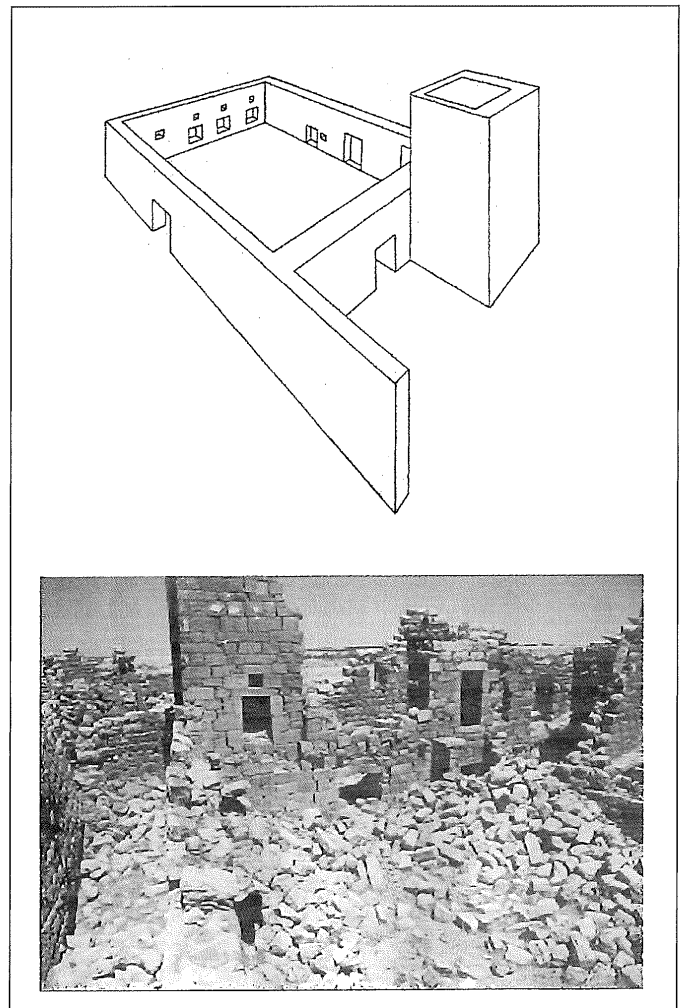
<sup>13</sup> See the previous note.

mon courtyard (FIG. 1). The axonometric projections (one seen from the east, the other from the west) show the two buildings giving onto the courtyard. Julian of Ascalon refers explicitly to this type, which was common throughout the Middle East: *“In the case of a courtyard belonging to more than one owner, the wall of which has to be demolished and rebuilt on several levels (2, 3 or 4), all those living on the storeys above the foundations, starting from the first storey, must contribute to the common expenses required for the foundations, in proportion to the heights of the various storeys”*<sup>14</sup>. After the common entrance, two flights of stairs, one for each building, provided access to the upper floors. These staircases are still partially visible, together the large ledges holding up the ceiling beams and thresholds of the doors on the first floor.

The second case investigated at Umm al-Jimāl is that of a private building, not far from the previous houses, but larger in size and different in plan (FIG. 2). This complex, one of the many still visible on the site, consists of a large quadrangle (ca. 20m per side), onto which several rooms on several levels give. A smaller courtyard (12.40m per side) is adjacent to the larger one. The axonometric projection and photograph show a reconstruction (above) and its present day state (below). Here too our findings at Umm al-Jimāl correspond to a typical case described in Julian of Ascalon's treatise: *“In the case of an inner courtyard of a court with three sides, one of which shuts off the inner courtyard, if the court only occupies this side, there is no use of the inner courtyard and if this courtyard requires cleaning or other attention, dispensation from payment is granted, since the inner courtyard*



1. Umm al-Jimāl. Area S/E — Houses with common courtyard.  
Axonometric projection (above); photo (below).



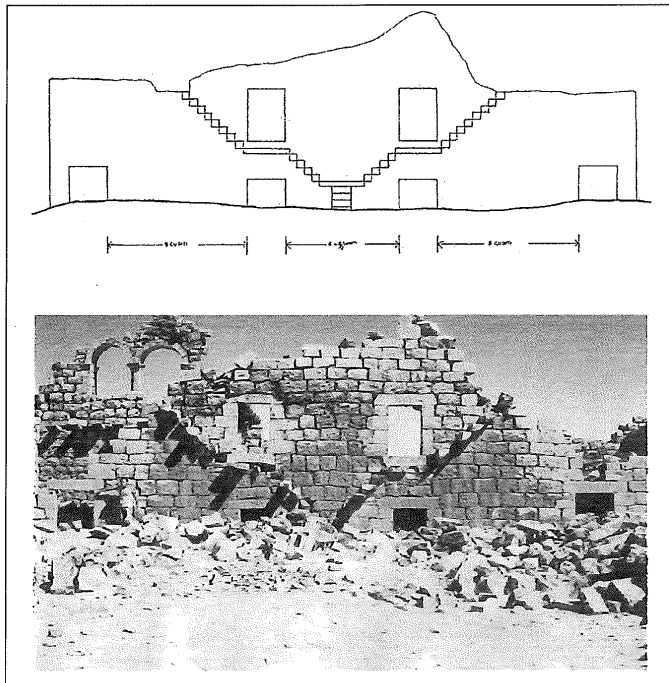
2. Umm al-Jimāl. Area S/E — Private building, small courtyard.

<sup>14</sup> In the second section, chapter 33.1.

is not used<sup>15</sup>. FIG. 2 also clearly shows the lane on the outer side of the minor courtyard, along the western side, an example of a town road system with few main streets and, as in this case, a network of narrow, winding lanes. Substantial remains of the second and part of the third storey of the apartments looking onto the northern side of the courtyard are clearly visible.

Attention was subsequently devoted to the eastern side of the large courtyard of the same complex (FIG. 3): five entrances (four of which can be seen in the photograph), today partially covered by earth, led to apartments and a double flight of stairs, still *in situ*, to the upper levels, of which only the entrances survive. This was a large collective housing complex. Life in, what in the USA are called 'condominiums', was regulated by treatises like the one by Julian of Ascalon. Occupants were obliged to follow precise norms of neighbourly cooperation, since the families living there shared common areas and the same infrastructure. Figures 4 and 5 provide a general view of the minor courtyard of this large complex and a detail of the lane along the western side (FIGS. 4 and 5). FIG. 6 is an overall view of the large courtyard.

*Umm Qays*: The second site studied was Umm



3. Umm al-Jimāl. Area S/E — Private building, eastern side of the large courtyard. Prospect (above); photo (below).

Qays, ancient Gadara, on the Golan Heights, near Lake Tiberias. The town was a stage on the caravan route from the East to the shores of the Mediterranean. It was founded in the fourth century BC. By Macedonian veterans, and in the following century



4. Umm al-Jimāl. Area S/E — Private building, small courtyard, general view of the small courtyard.



5. Umm al-Jimāl. Area S/E — Private building, small courtyard, detail of the lane along the western side.



6. Umm al-Jimāl. Area S/E — Private building. General view of the large courtyard.

<sup>15</sup> In the second section, chapter 38.1.

was occupied by a garrison from Ptolemaic Egypt, subsequently passing under the influence of the Seleucids of Syria. From the first century AD. It became part of the Decapolis, from then onwards remaining under Roman control, until it was conquered by the Islamic army in 636AD<sup>16</sup>.

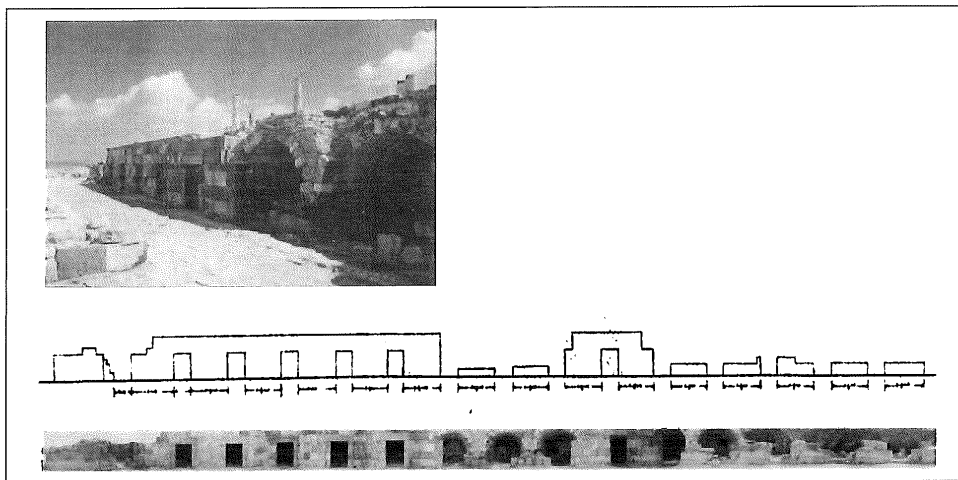
The Byzantine town kept the Roman plan, based on the two main road axes at right angles. The hub of the town was the imposing octagonal basilica, dating from the sixth century AD which was entered via a four sided portico looking over the *decumanus*. To the west of the basilica stood a series of one roomed structures with vaulted ceilings, opening onto the *cardo*<sup>17</sup>. These symmetrical, adjoining rooms were studied in our survey (FIG. 7).

Starting from the first room to the north, measurements were taken of the distances between the entrances, thus practically applying data supplied by Julian of Ascalon's treatise<sup>18</sup>. 10 feet or  $6^{2/3}$  cubits is the measurement most frequently used by Julian as the minimum distance to be observed between entrances<sup>19</sup>. Our measurements, on twelve occasions out of a total of fifteen, gave the figure of 3.12m<sup>20</sup>. In our view, this is of great interest for two main reasons: firstly because the widespread use of treatises on building norms like the one un-

der examination is confirmed, and secondly because these treatises can be regarded as valuable sources, not only for archaeological research, but also for ensuring correct conservation procedures of ancient structures<sup>21</sup>.

*Umm ar-Raṣāṣ*: The third and last site examined was Umm ar-Raṣāṣ, 30km to the south east of Ar-Mādabā, on the steppes stretching from Wādī al-Mūjib-Arnon to the south and Wādī al-Wāla-Hidān to the north (Abel 1967; Bowersock 1983; Parker 1986). In the Roman and Byzantine periods the town reached its most splendid stage, as a frontier town open to the trading routes of the whole of the Middle East (Lagrange 1898: 168; Bujard, Haldimann 1988: 101-109). Umm ar-Raṣāṣ has been identified with the biblical site of Mefa'a (Joshua 13: 18, 21: 37; Jeremiah 48: 21). In the first half of the fourth century AD. Eusebius of Caesarea wrote of a Roman fortress at Mefa'a<sup>22</sup>. Excavations unearthed the remains of numerous religious buildings within the *castrum*, as well as houses. To the north of the fortress a large residential area developed in Late Antiquity<sup>23</sup>.

It is here that we examined two buildings, almost entirely collapsed, but significant, nevertheless, for



7. Umm Qays. Roomed structures opening onto the *cardo*. Photo (above); prospect (below).

<sup>16</sup> Schumacher 1890; Wagner Lux *et al.* 2000: 425-431; Weber 1987: 531-534; ID. 1988: 349-352, 1989; Kuhnen 1990; Bol-Hoffmann-Weber 1990: 193-266; Weber 1991a: 123-134; ID. 1991b: 223-235.

<sup>17</sup> These rooms have recently been restored by archaeologists working at Umm Qays. The basalt blocks covering the vaulted structures have been put back into place.

<sup>18</sup> In Chapter 16 at the outset of the second section he wrote: "any-one building on the ground floor must keep at a distance of 10 feet from his neighbour/s".

<sup>19</sup> The measurement system used by Julian of Ascalon derived from the Roman-Philetaric one, in which a *cubit* equaled one and a half feet, the *bēma* equaled one and two thirds of a cubit and the *ākai-*

*na* six and two thirds of a cubit or ten feet: Hultsch 1882.

<sup>20</sup> Considering that a Byzantine foot equaled 31.2cm, 10 feet (or  $6^{2/3}$  cubits) equaled 3.12m.

<sup>21</sup> The application of data from treatises like this one allows one to avoid, or at least reduce mistaken conservation procedures on archaeological structures being restored.

<sup>22</sup> Piccirello, 'Attīyat 1986: 349-350. The identification of Umm ar-Raṣāṣ with Mefa'a was confirmed in 1986 thanks to the unearthing in the basilica of St. Stephen of a mosaic dating back to 785AD, where the name of the site can be read: *Kastron Mefaa* (Piccirello, 'Attīyat 1986: 347; Piccirello 1990: 527-541).

<sup>23</sup> Piccirello 1990: 527-541, 1990a: 463-466, 1992, 1992a: 366-369; Piccirello, 'Attīyat 1994.

our research (FIG. 8). Two adjacent entrance of two limestone dwellings can be seen clearly. Measurements of the distance between the two entrances were 3.40m or almost 11 feet, fully adhering to the data in Julian's treatise, where at least 10 feet is the norm. The same distance was found between two other entrances of adjacent buildings, this time inside the *castrum* at Umm ar-Raṣāṣ (FIG. 9). This is interesting since we are clearly above the limit imposed by the treatise: the distance to be adhered to could not be less than 10 feet.

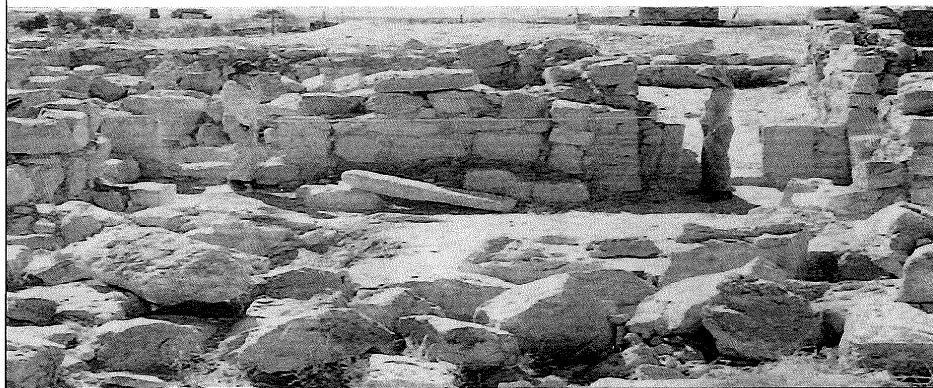
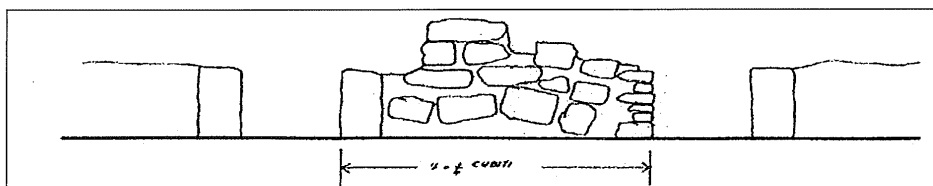
**Conclusions**

From the theoretical analysis of Julian of Ascalon's

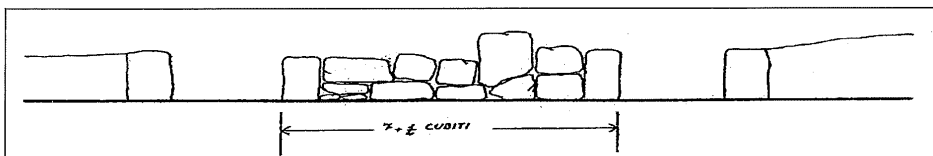
treatise we turned to an on site survey, which demonstrated the concrete application of some of its norms. The confirmation from three Jordanian sites underlines the great importance of historical written sources like this treatise both in the archaeology and conservation<sup>24</sup>. Scientific research cannot do without such sources.

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8. Umm ar-Raṣāṣ. Byzantine residential area to the north of the fortress — two adjacent entrances of two limestone dwellings. Prospect (above); photo (below).



9. Umm ar-Raṣāṣ. Residential area inside the fortress — two adjacent entrances of two limestone dwellings. Prospect (above); photo (below).

<sup>24</sup> Marino 1995; Infranca 1998, 2000; Khouri (ed.) 2003.

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